

## January 2005 College of William and Mary

### Applied Research Center Student Newsletter

Department of Energy Lab Tour January 10, 2005





On January 10, Milt Johnson (center) and Don Erbschloe (right), from the Department of Energy, took a tour of the lab as part of a process to familiarize Erbschloe with the projects at Jlab and the ARC. Erbschloe, an Air Force colonel and graduate from UVA, will be taking over the position of Office of Science Chief Operating Officer upon Johnson's upcoming retirement. He has also held several other high level positions, including Chief Scientist at the European Office of Aerospace Research and Development, Assistant to the Air Force Chief Scientist at the Pentagon, and Director of the Air Force Office of Scientific Research.



Nimel Theodore explains his work with plasma ion implantation

#### Other Recent Lab Visitors



Alan Rowe, a frequent visitor to the ARC, is the Chemistry Chair at Norfolk State University. He stopped by the lab on January 6<sup>th</sup> to talk to Amy about his research.

Jacob Dawson, a graduate student at NSU, regularly frequents the lab to use the AFM for his research, and Tiffany, an undergraduate at NSU, often accompanies him.





The Magnetic Force
Microscope mode on the
Scanning Probe
Microscope operates by
scanning a tiny magnetic
probe over the surface,
detecting small forces
exerted by the sample's
stray magnetic field. Learn
more about the process on
our SPM webpage\*.

# Launching the MFM!



Amy Wilkerson and Natalie Pearcy try out the MFM mode on the scanning probe microscope.

\* http://www.jlab.org/ARC/WM/123/SPM\_MAIN.htm

#### Ongoing Research



Laurel Averett is a senior physics major at William and Mary, and is doing research at the Applied Research Center as part of her senior honors thesis. Working with Professor Cooke, Laurel is doing preliminary roughness studies of 2,5 dihydroxy benzoic acid.

Kendra Letchworth, a sophomore physics and math major at William and Mary, is using the four point probe to find the resistivity of various materials



Editor: Kelly Sullivan Photographer: Olga Trofmova